

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A method of ~~indicating the presence of mechanical impact on~~ identifying subsurface damage to a composite material aircraft caused by a mechanical impact, comprising the steps of:

~~providing the material~~ a plurality of panels made from composite material,  
with each panel having a surface;

preparing an indicator paint having an impact-sensitive component that produces a visible change when subjected to a mechanical impact, wherein the indicator paint comprises a mixture of a first reactant and a second reactant separated by a barrier that is rupturable so that the first reactant and the second reactant mix and produce the visible change when the indicator paint is subjected to the impact;

~~applying the indicator paint to~~ covering the surface of ~~the material~~ each panel with the indicator paint;

~~placing the material having the indicator paint thereon into circumstances where it may be subject to the mechanical impact; and thereafter~~

visually inspecting the material having the indicator paint thereon for the presence of each panel periodically to locate the visible change[.]; and  
in response to locating the visible change on a respective panel,  
evaluating the respective panel to identify any subsurface damage.

2. (Currently Amended) The method of claim 1[.], wherein ~~the step of providing includes the step of~~  
~~providing the material as a low ductility~~ the composite material having has a tensile elongation to failure of less than about 2 percent.

3. (Currently Amended) The method of claim 1[.], wherein the evaluating ~~step of providing the material includes the step of~~ is accomplished by performing an X-ray inspection of the respective panel.  
~~providing a composite material having a tensile elongation to failure of less than about 2 percent.~~

4. (Currently Amended) The method of claim 1[.], wherein the evaluating ~~step of providing the material includes the step of~~ is accomplished by performing an acoustic inspection of the respective panel.  
~~providing a polymer matrix composite material having a tensile elongation to failure of less than about 2 percent.~~

5. (Currently Amended) The method of claim 1[[,]] wherein ~~the step of providing the material includes the step of~~ the panels are assembled to form the aircraft after the covering step.

~~providing a ceramic material having a tensile elongation to failure of less than about 2 percent.~~

Claims 6-8 (Canceled)

9. (Currently Amended) The method of claim 1[[,]] wherein ~~the step of preparing the indicator paint includes the step of~~

~~preparing~~ the indicator paint [[that]] does not emit light when subjected to the mechanical impact.

10. (Currently Amended) The method of claim 1[[,]] wherein the step of ~~placing includes the step of~~ inspecting is performed without

~~not instrumenting the material having the paint thereon with~~ light-detection instrumentation.

11. (Currently Amended) The method of claim 1[[,]] wherein the step of ~~inspecting includes the step of~~ is performed

~~inspecting the material having the indicator paint thereon~~ by an unaided eye.

12. (Currently Amended) The method of claim 1[[,]] ~~including an additional step, after the step of inspecting, of~~ further comprising the step of

determining a design limit for the composite material responsive to an observability of impact indications.

13. (Currently Amended) The method of claim 1[[,]] ~~including an additional step, after the step of inspecting, of~~ further comprising the step of

determining a first design limit for the composite material ~~in the event that it has the~~ with indicator paint applied thereto, and a second design limit for the composite material ~~in the event that it has~~ with no indicator paint applied thereto.

14. (Currently Amended) A method of ~~indicating the presence of mechanical impact on~~ identifying subsurface damage to a composite material aircraft caused by a mechanical impact, comprising the steps of:

providing ~~[[the]]~~ a plurality of panels made from composite material, ~~for an aircraft with each panel~~ having a surface, wherein the composite material has a tensile elongation to failure of less than about 2 percent;

preparing an indicator paint having an impact-sensitive component that changes color when subjected to a mechanical impact, wherein the indicator paint comprises a mixture of

a first reactant, and

a second reactant,

wherein the first reactant and the second reactant are separated by a barrier that is ruptured when the indicator paint is subjected to the mechanical impact;

~~applying the indicator paint to~~ covering the surface of the ~~composite material~~ each panel with the indicator paint;

~~placing the composite material having the indicator paint thereon into circumstances where it may be subject to the mechanical impact; and thereafter~~

visually inspecting the composite material having the indicator paint thereon for the presence of each panel periodically to locate a color change~~[[.]]~~; and

in response to locating the color change on a respective panel, evaluating the respective panel to identify any subsurface damage.

15. (Currently Amended) The method of claim 14[[,]] wherein the ~~step of~~  
~~preparing the indicator paint includes the step of~~

~~preparing the indicator paint that~~ does not emit light when subjected to the  
mechanical impact.

16. (Currently Amended) The method of claim 14[[,]] wherein the step of ~~placing~~  
~~includes the step of~~ inspecting is performed without

~~not instrumenting the composite material having the paint thereon with light-~~  
detection instrumentation.

17. (Currently Amended) The method of claim 14, wherein the step of  
inspecting ~~includes the step of~~ is performed

~~inspecting the composite material having the indicator paint thereon by an unaided~~  
eye.

18. (Currently Amended) The method of claim 14[[,]] ~~including an additional~~  
~~step, after the step of inspecting, of~~ further comprising the step of

determining a design limit for the composite material responsive to an observability  
of impact indications.

19. (Currently Amended) The method of claim 14~~[[,]]~~ ~~including an additional step, after the step of inspecting, of~~ further comprising the step of

determining a first design limit for the composite material ~~in the event that it has~~ with the indicator paint applied thereto, and a second design limit for the composite material ~~in the event that it has~~ with no indicator paint applied thereto.

Claims 20-24 (Canceled)

25. (Currently Amended) The method of claim 14~~[[,]]~~ wherein ~~the step of~~ providing the composite material includes the step of is

~~providing a polymer-matrix composite material having a tensile elongation to failure~~ of less than about 2 percent.